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A Comparison of GED Test Scores for Graduates Who Have Attended Test Preparation Class with Those Who Have Not Attended

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A Comparison of GED Test Scores for Graduates Who Have Attended Test Preparation Class with Those Who Have Not Attended

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CHAPTER ONE

Introduction

Americans expect a great deal of the public schools, trusting in the power of education to improve their lives and the lives of their children. One expectation is that the educational system will prepare students to become productive members of society. Another expectation is that the best possible quality of education must be available to all people. "There has never been a country whose system of education has served so many students so successfully for so many years and for such diverse ends" (Bennett, 1988, p. 1).

Traditionally, high school is considered the minimal level of educational attainment required by society. Not all individuals; however, are able to complete high school in a traditional manner, some become dropouts. The dropout issue has taken on even more importance because of the changing economy in the United States; which requires a more educated workforce and because of decreasing job opportunities for dropouts who lack literacy and computational skills (Martin, 1984).

An alternative to earning a traditional high school diploma is to earn a high school equivalency

certificate by successfully completing the General Educational Development (GED) test series. The GED tests are standardized tests in the areas of writing skills, science, social studies, literature, and mathematics. The tests are normed periodically on graduating high school seniors (Whitney, Malizio, and Patience, 1986).

According to national statistics, annually one out of every 7 high school graduates within the past 10 years has earned a high school equivalency or GED diploma (Whitney, 1986). This aspect makes the GED preparation component an important part of an Adult Basic Education (ABE) program, the government's official program to address adult literacy (Kozol, 1985).

The ABE program of the Omaha Public Schools is similar in many ways to the ABE programs throughout Nebraska and the rest of the nation. Morning, afternoon, evening, and Saturday classes are held in a variety of neighborhood locations. An open enrollment policy encourages adults to start class when it is convenient for them rather than follow a rigid schedule. Kozol (1985), however, indicates that too many ABE programs do not offer the flexibility that most adults need.

Students who take the GED in the Omaha area have two options: 1) they can take the GED without preparation or 2) they can enter a preparation course for taking the GED. Students who choose the latter are given an evaluation test to determine their academic needs. A certified instructor or volunteer tutor works with these students on an individualized curriculum. It should be noted that option 1 is not available to individuals who are 16, 17, or 18 years of age. These individuals are required to take the preparation course.

Once an instructor determines that a student is ready to take the GED, a practice GED test is given. If the student does well on the practice test, he/she is encouraged to take the actual GED test. Farr, Moon, and Williams (1986) agree that adults should be encouraged to take the GED test as soon as possible. This encouragement helps the former dropout reach his/her goal in a timely fashion.

The purpose of this study is to investigate the effectiveness of GED preparation courses. As many as 600 people graduate annually with a GED diploma from the Omaha Public Schools. Some of these people take the preparation course; however, there has never been an evaluation of the effectiveness of this type of

instruction.

Statement of the Problem

Is there a significant difference in the overall GED test score average of people who simply walk in to take tests compared to similar people who attend GED test preparation classes before testing?

Subproblem One. Is there a significant difference in the GED math test score of people who simply walk in to take tests compared to similar people who attend GED test preparation classes before testing?

Subproblem Two. Is there a significant difference in the GED writing skills test score of people who simply walk in to take tests compared to similar people who attend GED test preparation classes before testing?

Subproblem Three. Is there a significant difference in the GED test score average for 16, 17, and 18 year olds who are required to attend preparation classes compared to the scores of all GED graduates?

Hypothesis to be Tested

There is no significant difference in the overall GED test score average of people who simply walk in to take tests compared to similar people who attend GED test preparation classes before testing.

Subhypothesis One. There is no significant difference in the GED math test score of people who

simply walk in to take tests compared to similar people who attend GED test preparation classes before testing.

Subhypothesis Two. There is no significant difference in the GED writing skills test score of people who simply walk in to take tests compared to similar people who attend GED test preparation classes before testing.

Subhypothesis Three. There is no significant difference in the GED test score average for 16, 17, and 18 year olds who are required to attend GED preparation classes compared to the scores of all GED graduates.

Significance of the Problem

ABE administrators need to know if the GED preparation classes are effective. Since this program is comparable to others throughout Nebraska, the results of this study can be used by other Nebraska GED instructors and administrators. The State Director of Adult Education for Nebraska will also be informed of the results, since he requires all 16 and 17 year olds to attend GED preparation classes before allowing them to test. The ABE Supervisor for the Omaha Public Schools requires 18 year olds to attend GED preparation classes before allowing them to test.

This study examines the effectiveness of GED

preparation class, which focuses primarily on writing skills and math. If there is no difference in test scores between those students who take the preparation course and those who take the GED tests without the preparation course, the question arises as to whether the practice of requiring 16, 17, and 18 year olds to attend class should continue. For that matter, is the preparation class effective for any adult who completes the GED test series?

Assumptions and Limitations

There is one assumption associated with this study.

Assumption 1. The subjects of the study attended regularly and were able to make progress toward academic goals.

There are four limitations associated with this study.

Limitation 1. This study focuses only on those GED completers who tested at the GED testing center of the Omaha Public Schools between February 1, 1988 and December 31, 1988.

Limitation 2. The age of the subjects is limited to those persons who are 16 years and older.

Limitation 3. The subjects of the study completed the traditional paper and pencil tests, not the large

print, Spanish, or audiocassette version of the test series. Those people needing special adaptations for testing have also had special tutoring and extra help in preparation for the tests.

Limitation 4. Subjects of the study, who attended preparation classes, attended ABE/GED sites sponsored by the Omaha Public Schools.

Definition of Terms

ABE. Adult Basic Education - education for adults whose inability to speak, read, or write the English language constitutes a substantial impairment of their ability to get or retain employment.

Standardized Test. Achievement tests carefully designed by subject-matter specialists, published, and sold commercially. (Ahmann, 1962)

GED. General Educational Development - program for adults to earn high school equivalency credentials.

Adult. Any individual who is at least sixteen years old.

Graduate. Any individual who has successfully completed the GED test series.

Preparation class. Formal program to review, learn, or update skills necessary to successfully complete the GED test series.

CHAPTER TWO

Review of Related Research and Literature

The Purpose of Education

The American society expects the public education system to prepare students to function effectively in our society. Schools attempt to help all students become productive members of society by preserving and transmitting knowledge and by preserving and transmitting commonly accepted social values. This effort may include instruction in basic skills, human growth, consumer issues, good health and nutrition habits, interpersonal skills, and preparation for work. Schools are ultimately expected to provide students with a good basic academic foundation, to encourage responsible citizenship, and to promote lifelong learning habits.

Consequences of High School Noncompletion

The American society has long held the belief that a good education can help individuals overcome poverty and can provide both the knowledge and beliefs necessary for personal and economic success. The public has long understood the central role schools play in fostering economic productivity. Any student who does not complete a formal high school program or at least its equivalent is in danger of not becoming a

productive member to the community. This is one of the reasons that there has been concern for the rate of school noncompletion.

In 1900, approximately six percent of 17 year old students graduated from high school. By 1960, nearly 65 percent graduated. Hodgkinson (1985) reported that by 1978 75 percent of Black youth and 85 percent of white youth graduated from high school. This more highly educated workforce adds to the economic progress of the nation. The percentage of high school graduates has declined from 76 percent in 1980 to 73 percent in 1985 (Hodgkinson, 1985).

Barriers to Excellence: Our Children at Risk (1985) and Investing in Our Children (1985), reported that one reaction to A Nation at Risk (1983) was to require more credits for high school graduation. The higher requirements may cause more students to drop out of high school. These students then face limited employment opportunities and cannot readily enter postsecondary institutions and career training programs.

The costs of not earning a high school diploma are high in both monetary and human terms. Data show that dropouts earn lower hourly wages than high school graduates and have less desirable jobs (General

Accounting Office, 1986). One estimate shows the difference in lifetime earning capacity for a male high school graduate is $266,000 more than a male high school dropout. The difference for females is $199,000 (National Governors' Association, 1987). In addition to experiencing lower earnings, dropouts are more apt to receive welfare and to become involved in crime than high school graduates (General Accounting Office, 1986). Other consequences of dropping out include a loss of national income, lost income tax revenue, decreased political participation, and decreased intergenerational mobility. The General Accounting Office (1986) estimated that the lifetime earnings loss of all the nation's dropouts in 1981 would be $228 billion.

Concern for Education

Since the public education system is expected to do so much for so many, it is often scrutinized by society. Business and political groups have made recommendations for educational reform. The business community is concerned about having an adequately trained workforce. Employers identify the need for workers to have stronger basic skills to accomplish current workplace tasks and to be able to adapt to the future workplace. Too many high school graduates lack

reading, writing, and computational skills at an acceptable level to make them readily employable (Committee for Economic Development [CED], 1985).

According to the Workforce 2000 report, the majority of new jobs will require some postsecondary education; only 27 percent of new jobs will require low academic skill levels as opposed to 40 percent today; and more jobs in the service industry will demand higher skill levels. To meet these challenges, the public education system needs to raise its performance expectations of all students.

Stricter accountability and higher standards for the educational system are the desired results of the educational reform movement. The business community suggested the curriculum should stress literacy, mathematical, and problem-solving skills, emphasizing learning how to learn and adapting to change. A high school diploma should mean that a student has at least met a standard of achievement (CED, 1985).

Approximately 25 percent of the nation's youth do not finish high school in the traditional four year setting. If and when these dropouts want to complete school or earn a high school diploma, they have an option to do so in a nontraditional manner. By earning a GED diploma, the school dropout can show prospective

employers that he has met a minimum standard of achievement. This high school equivalency diploma enables the student to apply for work or to enroll in institutions of higher education. An alternative to traditional high school graduation is crucial to the dropout. Without such an alternative, the dropout has few job prospects, particularly as the trend continues toward a better educated workforce (Martin, 1984).

Adult Basic Education and General Educational Development

In 1942 the examination staff of the United States Armed Forces Institute designed the General Educational Development tests to measure the major outcomes generally associated with four years of high school instruction. The intent of the original GED tests was to provide military personnel and veterans, who had not completed high school, the chance to demonstrate academic achievement comparable to that of high school graduates. Examinees did not have to return to traditional high school settings to pursue educational and vocational aspirations that had been delayed by military service.

After World War II, it was obvious that civilians could benefit from the same type of standardized testing. The Commission on Accreditation of Service

Experiences made the tests available to nonveteran adults. By 1959 nonveterans represented the majority of test takers, so in 1963, the Veterans Testing Service was renamed the General Educational Development Testing Service (American Council on Education [ACE], 1987).

Policy direction and program supervision are a shared responsibility of the GED testing service and state, province, or territory departments of education. Each jurisdictional department of education determines the minimum test score requirements to obtain a high school equivalency credential. In Nebraska the minimum test score is 40 on each of the five tests or 45 for an average of the test battery.

The GED program enables adults to demonstrate they have acquired learning comparable to that of high school graduates. It is now recognized nationally by both employers and postsecondary institutions; with the GED dropouts have more employment opportunities, educational opportunities, and earning opportunities.

More than ten million adults have earned GED credentials since 1942. Nearly 15 percent of all high school diplomas nationally, approximately 440,000 annually, are high school equivalency certificates (ACE, 1986).

The 1988 GED tests are the result of a five-year review process. From the recommendations of the test specifications committee, the following themes became apparent:

* demand more highly developed levels of critical thinking and problem solving
* emphasize skills relationship to aspects of the work world and consumer skills
* acknowledge role and impact of computer technology
* contain settings that adults consider relevant to life (Swartz, 1987)

These recommendations were incorporated into the tests by the introduction of the written essay and by more reliance on interpretation and application of reading passages rather than the simple recall of facts. Adaptations of the GED are available for special need students.

GED preparation classes have become a part of the Adult Basic Education (ABE) program, the official adult literacy program of the federal government. The Economic Opportunity Act of 1965 and subsequent federal funding in 1964 led to the establishment of the ABE program. The purpose of ABE, as amended in 1978, is to expand educational opportunities for adults and to

encourage the establishment of programs for adult education that will do the following:

* enable all adults to acquire basic skills necessary to function in society
* enable adults who so desire to continue their education to at least the level of completion of secondary school
* make available to adults the means to secure training that will enable them to become more employable, productive, and responsible citizens (Public Law 95-561).

The premise of the legislation was that if the educationally disadvantaged acquired basic academic skills, they become more employable and better citizens. The goal of ABE then was to provide training in reading, language, math, and writing for adults. The use of standardized tests for both assessment or performance evaluation has become widely accepted by ABE practitioners.

The Standardized Tests

The evaluation of individual abilities has been going on for as long as human beings have been organized into groups and societies. The standardized test was a result of the realization that individual differences in intellectual abilities were measurable

(Goslin, 1963). The use of standardized testing has grown rapidly in the United States for the past seventy years. The problems of manpower allocation during World War I and World War II, an influx of immigrants, concern with educational efficiency, and advanced technology have made the use of standardized tests more popular.

Schools use standardized tests for guidance, grouping, and evaluation. Other organizations use them for selection, admissions, or standard setting. Standardized test performance in any situation is just as dependent on the test requirements as on the ability of the individual being tested. When motivation and personal situations, such as a disadvantaged background, are taken into consideration, the actual evaluation of standardized test performance becomes very complex. Actually, the use of standardized tests measures selected characteristics to differentiate among the individuals (Goslin, 1963).

The National Commission on Excellence in Education based its findings summarized in A Nation At Risk on the results of standardized tests. These results showed scholastic aptitude has declined over time; average achievement for students in the United States in most subject areas was lower than that of students

from other developed countries; and the high level of functional illiteracy in the United States was unacceptable. Consequently, the influence of standardized tests on educational programs and policies must be taken seriously.

Standardized Test Preparation

The acquisition of appropriate study and test taking skills and attitudes is an important developmental task for students if they are to make satisfactory academic progress in an educational system which relies heavily on testing (Wilson, 1986). Just knowledge of the material does not guarantee success on a standardized test. Students must become familiar with the test format, understand directions, pace themselves, and use good test-taking strategies (Ritter, 1988). Test-wiseness is a term often used to refer to a student's capacity to utilize the characteristics and formats of a test to receive a higher score (Benson, Urman, and Hocevar, 1986).

In order for students to become test-wise, coaching for standardized tests has become popular. Coaching is defined as training students to answer specific types of questions and to provide information for a specific test (George, 1985).

Coaching for standardized tests has raised several

issues. One major issue is whether or not coaching can produce significant test score gains. A second issue is a fine line between whether coaching is preparing students for a test or teaching to a test. A third issue is who benefits from coaching and what types of tests are appropriate for coaching. Another issue is whether coaching can ever replace effective instruction.

Data concerning coaching and improved test scores are inconclusive. White (1988) stated that 24 of 27 students who took an SAT review course improved their scores by 50 to 290 points. Even with a 42 hour SAT review course, those students who had not mastered the basics of reading and math did not earn higher test scores. In DeKalb, Georgia an experimental group of 56 students gained an average of 109 points between pretest and posttest SAT assessments (Caplan and O'Rourke, 1988).

An initial study in 1978 by the Boston regional office of the Federal Trade Commission found significant differences between the SAT test scores of coached and uncoached students. After a 40 hour review course, students improved their test scores by as much as 100 points. Another study by the same office involving underachievers found an average improvement

of 25 points on both the verbal and mathematics score. Through a reanalysis of the two studies and taking into account normal growth and motivation, the effect of coaching on improved test scores was approximately 11 points on the verbal test score and 30 points on the math test score. Researchers believe, however, this type of gain would be expected if students just devoted more time to regular academic study (Educational Research Service, 1981).

Coaching for other standardized tests has also produced mixed results. Elementary school student performance on subtests of the California Achievement Tests (CAT) did not produce consistent increases in test scores for a coached group compared to an uncoached group (Deaton, Halpin, and Alford, 1982). The researchers concluded that coaching in broad skill training had a greater effect on test scores.

The effects of training for test-wiseness on math and reading achievement tests among third and fifth grade students were studied. The results showed no significant difference between the experimental and control groups of either grade in reading. However, the findings did indicate a significant difference for 5th grade math scores of the coached group (Benson, et al, 1986).

After a reanalysis of a 1983 study of the Graduate Management Admissions Test, Powers (1987) determined the effect of various test preparation methods was not statistically significant. Graduate Record Examination (GRE) test preparation, sold as a commercial package, resulted in a 53 point advantage for participating examinees. Dolly and Williams (1986) found that the experimental group of college sophomore education majors significantly outscored the uncoached group on a multiple-choice test when cognitive strategies were included in test-wiseness. Only when test-wise cues were apparent did the coached group outscore the control group on content tests.

Coaching also appears to benefit learning disabled students. Scruggs (1986) found that learning disabled students scored significantly higher on tests of reading decoding and math concepts after participation in test-taking skills for five days. The results of this study may be applicable to the GED test preparation class, where some of the undereducated adults may have learning disabilities.

Powers (1987) expressed the concern that those students who could benefit most from standardized test preparation are also those who can least afford to pay for such service. In an ABE or GED program there is no

cost for a student to attend preparation class. The same type of test preparation is available to all adults. Fountain (1983) stated the use of GED practice tests familiarized students with the test format and reduced test anxiety. The most successful learning experiences with adults were highly interactive and very much teacher directed.

An ethical concern regarding coaching for standardized tests is the difference between preparing for or teaching to a particular test (George, 1985). In the Omaha ABE program, instructors for GED preparation classes do not have access to the GED test. They use a practice test, so they do not teach specific answers for the standardized GED test. This method is in line with Harry Handler's (1985) statement, "Teaching the items on the test would be wrong, but we do want teachers to cover the material that will be tested" (p. 24).

It is apparent from a review of the literature that adults can improve GED standardized test scores by attending preparation class. Even if the student does not need help with basic academic skills, it would appear that familiarity with test format should reduce test anxiety and result in higher scores. The GED preparation class attempts to provide students with the

basic format of the test, a review or upgrading of basic academic skills, general test-wiseness as well as math and reading strategies for the five tests, writing with an essay component, mathematics, science, social studies, and literature.

CHAPTER THREE

Methodology

The purpose of the study was to compare GED test scores of those graduates who have gone through a preparation class with those graduates who have had no formal GED instruction. The study dealt only with those adults who had participated in a preparation class and had tested at the testing center sponsored by the Omaha Public Schools.

To compare the scores of the two groups of GED completers, a data-gathering instrument was developed (see Appendix A). Some of the necessary information was available on the application form that every individual must complete before testing (see Appendix B).

Selection of the Population

The population consisted of 353 people who had successfully completed the GED test series between February 1, 1988 and December 31, 1988. Those people who fail the GED test series were not included in the study because the failing scores could artificially lower the mean score of the comparable group. There were 18 failures last year. Since the 16, 17, and 18 year olds were required to attend GED preparation class, they were considered a subset of the total group

that attended classes. The GED graduates completed the tests at the O.P.S. testing center.

The Instrument

The data gathering instrument consisted of information organized in three general parts. The first section required recording the age of the GED graduate, to facilitate separation of data for the 16, 17, and 18 year olds. The second part consisted of recording the GED test score average, the mathematics test score, and the writing skills test score. Class attendance or non-attendance was the data gathered in the last section.

The original problem of whether there is a difference in GED test scores between class attenders and non-attenders was addressed by data collection from all sections of the instrument. The subproblem regarding scores of 16, 17, and 18 year old graduates was addressed by sections I and II, since this group of subjects must attend GED preparation classes. The subproblems of differences in mathematics test and writing skills test scores between attenders and non-attenders were addressed by sections II and III.

Procedures

A data sheet was completed for each of the 353 individuals who successfully completed the GED test

series at the Omaha Public Schools testing center between February 1, 1988 and December 31, 1988. The GED application form of each individual graduate was used to determine answers to some of the basic questions on the data gathering instrument. The age of the subject, the GED test score average, and the scores of both the mathematics and writing skills tests were found on this form. Class records were then checked to determine which graduates had attended GED preparation classes.

The mean and standard deviation of the total GED test battery score were determined for the three groups; 16, 17, and 18 year olds, a composite of those attending class, and a composite of those not attending class. The mean and standard deviation of both the mathematics test and the writing skills test were determined for each of the three groups. Z-test analysis was used to assess the difference between groups and to test the major and subhypotheses. After compiling this information, a variety of tables and graphs was made for presentation in Chapter 4.

CHAPTER FOUR

Presentation and Analysis of Data

The purpose of this study was to investigate the effectiveness of GED preparation courses. The major hypothesis tested was there is no significant difference in the overall GED test score average of people who simply walk in to take tests compared to similar people who attend GED test preparation classes before testing.

The subhypothesis included the following three statements: There is no significant difference in the GED math test score of people who simply walk in to take tests compared to similar people who attend GED test preparation classes before testing. There is no significant difference in the GED writing skills test score of people who simply walk in to take tests compared to similar people who attend GED test preparation classes before testing. There is no significant difference in the GED test score average for 16, 17, and 18 year olds who are required to attend GED preparation classes compared to the scores of all GED graduates.

The data gathering instrument consisted of information organized in three general parts. The first section required recording the age of the GED

graduate. A second section required recording class attendance or non-attendance. A third section required recording the GED test score average, the mathematics test score, and the writing skills test score.

For this study, the 353 GED graduates of the OPS program between February 1, 1988 and December 31, 1988 were divided into three groups. These were the 16, 17, and 18 year olds, a composite of those attending class, and a composite of those not attending class. There were 97 graduates in the first group, 186 in the second, and 167 in the third. After determining the range, mean, and standard deviation for the total test, writing skills test, and math test, Z-test analysis was used to assess the difference between composite groups.

The number of GED graduates in each age category and those who attended preparation class is shown in Table I. All 16, 17, and 18 year olds are required to attend preparation class before testing. Those people 19 years or older have the option of attending class before testing.

There is a small number of 16 and 17 year olds in this study. Of the 353 graduates, 186 are classified as class attenders, while 167 are non-attenders. All of those graduates not attending are in the 19 year and

Table I

Number of GED Graduates Attending Class.

Age	Number	Number Attending Class
16	4	4
17	30	30
18	63	63
19+	256	89
	Total 353	Total 186

older category.

The range, the mean, and the standard deviation of the total GED test score for the three composite groups are shown in Table II. The same figures are shown for the 19 year and older attender group.

Table II

Range, Mean, and Standard Deviation of Total GED Test Score.

Group	Range	Mean	Standard Deviation
16, 17, 18 (N=97)	40-66	51.567	5.571
Attenders (N=186)	40-66	51.425	5.502
19+ Attenders (N=89)	41-64	51.270	5.452
Non-Attenders (N=167)	39-66	50.557	5.321

N = Number of graduates

The mean of the 16, 17, and 18 year old group is

the highest, and the mean of the non-attenders group is the lowest. The lowest score of 39 was earned by a non-attender. The mean of all attenders is approximately .9 higher than the mean of the non-attenders in the overall GED test score average.

The range, the mean, and the standard deviation of the writing skills test scores for the composite groups is shown in Table III.

Table III

Range, Mean, and Standard Deviation of Writing Skills Test Score.

Group	Range	Mean	Standard Deviation
16, 17, 18 (N=97)	40-66	50.835	6.123
Attenders (N=186)	37-66	49.952	6.540
19+ Attenders (N=89)	37-66	48.989	6.871
Non-Attenders (N=167)	37-63	47.982	5.606

N = Number of graduates

The mean of the non-attenders group for the writing skills test score is the lowest, and the mean of the 16, 17, and 18 year olds group is the highest. The mean of the attenders group is approximately 2 points higher than the mean of the non-attenders group.

The range, the mean, and the standard deviation of the math test score for the composite groups are shown in

Table IV.

Table IV

Range, Mean, and Standard Deviation of Math Test Score.

Group	Range	Mean	Standard Deviation
16, 17, 18 (N=97)	37-66	49.124	6.239
Attenders (N=186)	37-66	48.355	5.862
19+ Attenders (N=89)	37-66	47.517	5.330
Non-Attenders (N=167)	37-66	47.760	5.838

N = Number of graduates

The mean of the attenders group for the math score is approximately .6 higher than the mean of the non-attenders group. The mean of the non-attenders group is slightly higher than the mean of the 19 year and older attenders group. The highest mean is for the 16, 17, and 18 year old group.

The bar graph in Figure 1 shows a comparison of the mean scores in the total test, writing skills, and math scores for the composite groups. The 16, 17, and 18 year olds have the highest mean for each test score. The non-attenders group has the lowest mean for each test score.

The Z-test analysis for significance at the .05 level is used to assess the difference between the composite groups and to test the major and

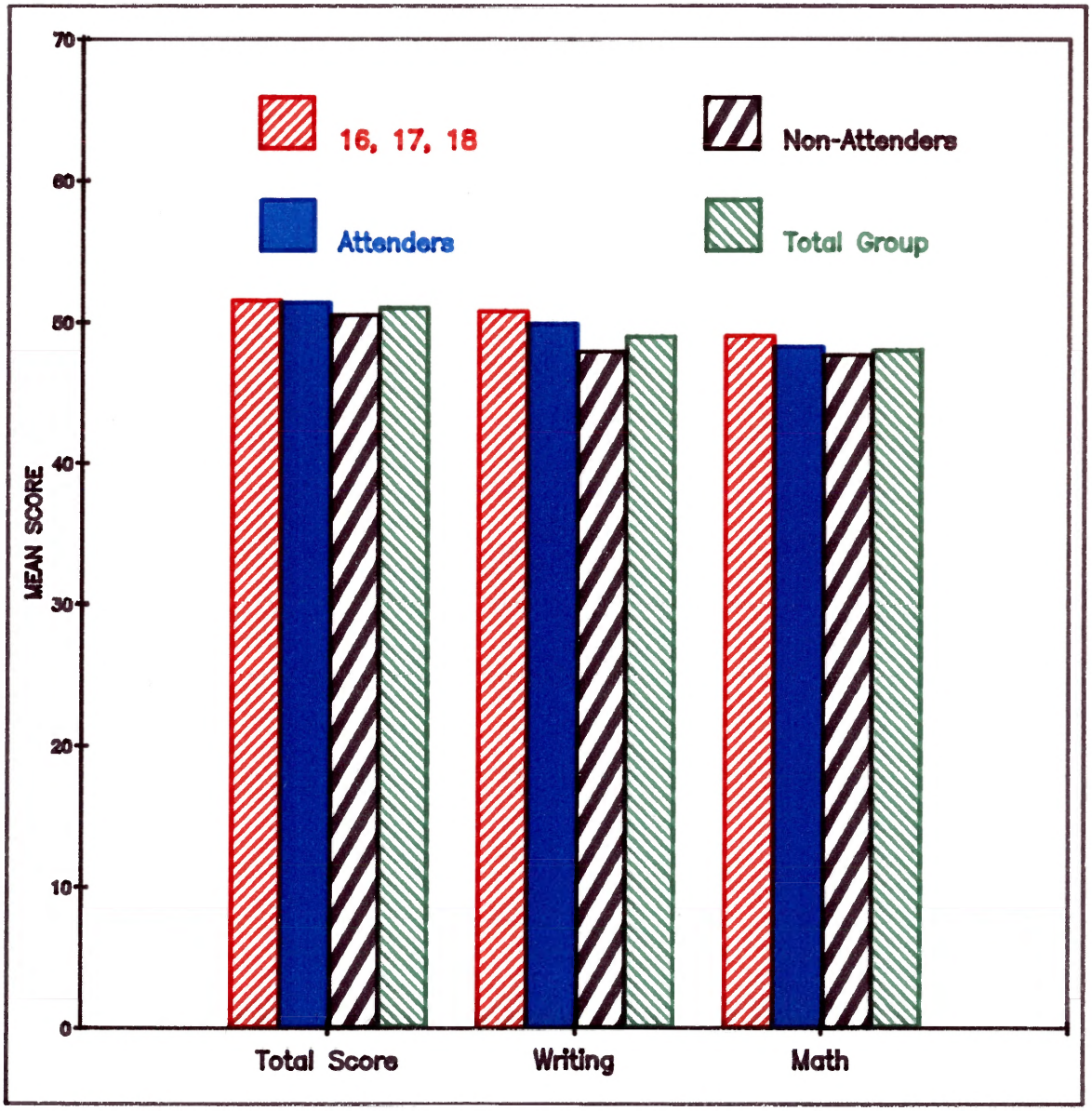

Figure 1. Comparison of Mean Scores of Three Composite Groups with the Total Group.

subhypotheses. The comparison of the non-attenders group with the other composite groups is shown in Table V.

Table V

Z-Test Analysis for the Non-Attenders Compared to Composite Groups.

Group	Total Test		Writing Skills		Math	
	$\bar{X}$	Z	$\bar{X}$	Z	$\bar{X}$	Z
16,17,18 (N=97)	51.567	-1.444	50.835	-3.763*	49.123	-1.753
Attenders (N=186)	51.425	-1.506	49.952	-3.045*	48.355	-0.954
Non-Attenders(N=167)	50.557	-----	47.982	-----	47.760	-----

* P < .05 $\bar{X}$ = Mean
N = Number of graduates Z = Z-test comparison

There is a significant difference at the 5 percent level on a two-tailed test for the non-attenders group compared to the other two groups in the writing skills area. Those graduates who attended GED preparation class before taking the writing skills test score signficantly higher than those graduates who do not attend class. The class attenders score higher but not significantly higher on the overall test average and

the math test than do the non-attenders. The 16, 17, and 18 year old group show a more significant difference in the writing skills test score than the attenders group when compared with the non-attenders. The 16, 17, and 18 year olds also show higher scores in the overall test average and the math test than do the non-attenders.

The Z-test analysis for comparison of the attenders group with the other composite groups is shown in Table VI.

Table VI

Z-test Analysis for the Attenders Compared to Composite Groups.

Group	Total Test		Writing Skills		Math	
	$\bar{X}$	Z	$\bar{X}$	Z	$\bar{X}$	Z
16,17,18 (N=97)	51.567	-0.204	50.835	-1.125	49.124	-1.005
Attenders (N=186)	51.425	-----	49.952	-----	48.355	-----
Non-Attenders(N=167)	50.557	1.506	47.982	3.047*	47.760	0.954

* P < .05 $\bar{X}$ = Mean
N = Number of graduates Z = Z-test comparison

There is a significant difference at the 5 percent level on two-tailed test for the attenders group

compared to the non-attenders group. Those graduates who did not attend class before taking the writing skills test score significantly lower than class attenders. The 16, 17, and 18 year olds score higher, but not significantly higher, on the overall test average, the writing skills test, and the math test than do the attenders.

CHAPTER FIVE

Conclusions, Summary, and Recommendations

Restatement of the Problem

The purpose of this study was to investigate the effectiveness of GED preparation courses. The major hypothesis tested was there is no significant difference in the overall GED test score average of people who simply walk in to take tests compared to similar people who attend GED test preparation classes before testing

The subhypotheses included the following three statements: There is no significant difference in the GED math test score of people who simply walk in to take tests compared to similar people who attend GED test preparation classes before testing. There is no significant difference in the GED writing skills test score of people who simply walk in to take tests compared to similar people who attend GED test preparation classes before testing. There is no significant difference in the GED test score average for 16, 17, and 18 year olds who are required to attend GED preparation classes compared to the scores of all GED graduates.

Description of the Procedures Used

The data gathering instrument consisted of

information organized in three general parts. The first section required recording the age of the GED graduate. A second section required recording class attendance or non-attendance. A third section required recording the GED test score average, the mathematics test score, and the writing skills test score.

For this study, the 353 GED graduates of the OPS program between February 1, 1988 and December 31, 1988 were divided into three groups. These were the 16, 17, and 18 year olds, a composite of those attending class, and a composite of those not attending class. There were 97 graduates in the first group, 186 in the second, and 167 in the third. After determining the range, mean, and standard deviation for the total test, writing skills test, and math test, Z-test analysis was used to assess the difference between composite groups.

Principal Findings and Conclusions

The results of this study suggest that there is a significant difference at the 5 percent level between class attenders and non-attenders in the writing skills area. There is a significant difference in the writing skills test score of people who simply walk in to take tests compared to similar people who attend GED test preparation class before testing.

The attenders group has a slightly higher mean

score in the overall test score average than does the non-attenders group. In the writing skills area the mean score of the attenders group is approximately 1 point higher and is significantly higher than the score of the non-attenders. The mean of the math test score is .6 higher for the attenders than the non-attenders.

The results of this study suggest that there is no significant difference between class attenders and non-attenders in the total test score and in the math test score. The null hypothesis can be accepted for the major hypothesis and for the subhypothesis regarding the math test area. There is no significant difference in the GED test score average or in the GED math test score of people who simply walk in to take tests compared to similar people who attend GED test preparation classes before testing.

The comparisons reveal that the 16, 17, and 18 year olds as a group have the highest mean score in the total test average, the writing skills test, and the math test. The score of this group is not significantly higher in the overall test average; therefore, the null hypothesis can be accepted. There is no significant difference in the GED test score average for 16, 17, and 18 year olds who are required to attend GED preparation classes compared to the

scores of other composite groups.

Recommendations

There is evidence from this study that there is a significant difference in the writing skills test score of the 16, 17, and 18 year old group compared to other groups. This is the group that is required to attend class before taking GED tests. That practice should continue. More research needs to be done to determine more specifically whether it is GED preparation class attendance or recently leaving school that contributes to a higher writing skills test score.

The 16, 17, and 18 year old group had higher scores than the other two composite groups. Further study should be done to determine whether it is test-wiseness or basic skills improvement from GED preparation class that leads to the improved scores. The practice of requiring 16, 17, and 18 year olds to attend class before testing should continue, for improved scores as well as for not making the GED route an easy out for teenage dropouts.

Another area of research that could be done is to consider the high school grades and the number of credits earned by an individual before dropping out of school. Higher grades earned or a greater number of credits earned may contribute to higher GED test

scores. Another factor that may contribute to the level of GED test achievement is how long the graduate has been out of a formal educational program. A third factor that warrants study is how long an individual stayed in school before dropping out.

The evidence from this study suggests that instruction in a GED preparation class leads to higher test scores for some individuals. Further research is needed to determine whether test taking cues or basic academic skill instruction results in higher scores. Perhaps a high degree of self-esteem helps the individual score higher than other people.

Evidence from the study suggests that younger graduates of 16, 17, and 18 year olds score higher than graduates 19 years and older. More research is needed to determine how age affects GED test scores.

Another study that could be done is to compare the OPS program with another or others in Nebraska. Demographics of students, as well as test scores, could be compared. If one program is significantly outperforming another, possible suggestions for improvements could be made.

Program Implications

The study shows that 16, 17, and 18 year olds score significantly higher than other graduates on the

writing skills test and higher on the total test and math test. The practice of requiring this group to attend class should continue. Class attendance gives the teenage dropout a chance to prepare for the test, as well as time to consider whether an equivalency program is the best alternative to dropping out of school.

Preparation class attenders earn higher scores on all three tests than non-attenders. The practice of encouraging all potential GED graduates, regardless of age, should continue. The exposure to the practice GED test acquaints students with the test format, directions and type of answer sheet used.

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APPENDIX A

APPENDIX A

GED Graduate Information

I. Age of graduate _____16 _____17 _____18 _____19+

II. Test Scores

GED Test Average _____

Writing Skills Test _____

Mathematics Test _____

III. GED Class Preparation

Attended Class _____

Did not attend class _____

APPENDIX B

APPENDIX B

Return to:
Nebraska Department of Education
Adult and Community Education
Section
301 Centennial Mall South
P.O. Box 94987
Lincoln, Nebraska 68509-4987

Form: NDE 12-003
Revised: 10-81

APPLICATION FOR STATE OF NEBRASKA
HIGH SCHOOL DIPLOMA

OMAHA PUBLIC SCHOOLS

PRINT IN INK

1. Legal Name _____ (Last Name) (First) (Initial) (Maiden)
2. Social Security No. ☐☐☐ ☐☐ ☐☐☐☐ Telephone No. _____
3. Address _____ (Number & Street) (City) (State) (Zip Code)
4. Place of Birth _____ (City) (State) Date of Birth _____ (Month) (Day) (Year)
5. Have you been a NEBRASKA resident for at least 30 days prior to making this application? Yes ☐ No ☐
6. Name of high school last attended _____
   Address of school _____ Date last attended _____ (Month) (Year)
7. CIRCLE highest grade of school COMPLETED: 4 5 6 7 8 9 10 11 12
8. Have you previously taken the GED TEST? No ☐ Yes ☐ Where? _____ When? _____
9. Why are you taking the GED test? ☐ Continuing Education ☐ Self-Satisfaction ☐ Employment
   ☐ Other (please indicate) _____
10. I CERTIFY the above statements are true to the best of my knowledge.

_____ (Sign in the presence of Notary) _____ (Date)

Subscribed and sworn to before me this

_____ day of _____, 19 _____

_____ (Notary Public) (SEAL)

My Commission expires _____, 19 _____

APPLICANT DO NOT WRITE BELOW THIS LINE

FOR TEST CENTER USE ONLY

40/45

Test Center _____

	Date
B.D. verified: B.C. Tr.	
Approved for Test	

Signature _____

TEST	DATE	FORM	S.S.	% RANK
Writing				
Soc. Studies				
Natural Sci.				
Reading				
Math				
Total Score				
Av. Score				

Date Reported to State Dept. _____

_____ (Signature Local Chief Examiner)

Diploma Issued LEA _____ _____

FOR STATE USE ONLY

Diploma Issued SDE _____ _____ _____ Receipt No. _____
(Date) (Initial) (No.) Ck. M.O. Cash

013-08-054 Revised: 10-81